

Amendments to the Specification

Please replace the paragraph beginning at page 3, line 22, with the following redlined paragraph:

Figure 6 shows nuclear translocation of NF- κ B in THP-1 cells (monocyte cell line) untreated (from left, first panel, images; second panel, quantitation of first panel images) and treated with LPS (third panel, images; fourth panel, quantitation of third panel images). Images are from darkfield, NF- κ B labeled, brightfield, and 7-AAD nuclear-label labeled.

Please replace the paragraph beginning at page 4, line 6, with the following redlined paragraph:

Figure 11 shows images of nuclear translocation of NF- κ B in adherent A-549 cells untreated (from left, first panel, images; second panel, quantitation of first panel images) and treated with IL-1 β /TNF- α (third panel, images; fourth panel, quantitation of third panel images). Images are from darkfield, NF- κ B labeled, brightfield, and 7-AAD nuclear-label labeled.

12 line 27
Please replace the paragraph beginning at page ~~14, line 16~~ ^{12 line 27}, with the following redlined paragraph:

By way of background and wishing to be bound by theory, NF- κ B resides predominantly in the cytoplasm in resting cells. Activating treatments (*e.g.*, IL-1 β /TNF- α or LPS) induce NF- κ B translocation into the nucleus in responsive cell types. Thus, the ratio of nuclear to cytoplasmic ~~NF- κ B~~ NF- κ B increases with LPS treatment. Similar to the A-549 cells, NF- κ B is translocated from the cytoplasm to the nucleus when the non-adherent human monocyte cell line, THP-1, is exposed to lipopolysaccharide (LPS). Using the identical probing protocol and CCF, again a quantifiable difference in the nuclear localization NF- κ B is demonstrated when comparing untreated and LPS-

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/J.L.W./
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treated cells (*see* Figures 6 and 9). A nuclear and NF- κ B pixel signal correlation analysis CCF was used to quantitate the difference between untranslocated NF- κ B and NF- κ B translocated to the cell nucleus. The CCF distinguished location-specific (nuclear and cytoplasmic) quantitation of NF- κ B to distinguish LPS-treated from untreated THP-1 cells. Thus, the methods of the present disclosure may also be used with non-adherent cells and cell lines.

15 line 3

Please replace the section beginning at ~~page 17, line 1~~, with the following

redlined section:

A. Materials

01. anti-NF κ B (F6) : Santa Cruz Biotechnology (Cat. No.SC-8008),
200 μ g/ml
02. Alexa Fluor488 donkey anti-mouse IgG: Molecular Probes (~~Cat~~),
1.1 mg/ml
03. Streptavidin Alexa Fluor 488: Molecular Probes
04. Recombinant human TNF- α : BD (Cat# 554618, Lot#
0000056653)
05. Recombinant human IL-1 β : ~~ebioscience~~ eBioscience (Cat# 14-
8018-62, Lot#)
06. A549 cells (ATCC No. CCL-185)
07. Dulbecco's MEM
08. Fetal Calf Serum
09. F-25 Culture Flask
10. 0.25 % trypsin / EDTA
11. Phosphate buffered saline without Ca^{2+} / Mg^{2+} (PBS)
12. 4% PFA/PBS (Fixation Buffer)
13. 0.1% triton X-100/PBS (Perm Buffer)